

NOTES ON THE SOUTH AUSTRALIAN FLORA

Monopsis simplex (L.) E. Wimmer (Campanulaceae), a new generic record for South Australia

Since 1962 when Miss D. Hunt sent material from damp or swampy sites in the Coomau area, near Naracoorte, a member of the subfamily Lobelioideae in Campanulaceae has caused problems in identification. It was initially identified in AD with *Lobelia rhombifolia* De Vriese, then *Lobelia pratioides* Benth. and most recently *Pratia purpurascens* (L.) E. Wimmer. In late 1983 it was found on Kangaroo Island (*G. Jackson 1636*).

The plant is *Monopsis simplex* (L.) E. Wimmer, a native of South Africa. It is a decumbent to erect, low annual with the flowers and especially the fruits abruptly upturned from the apex of the long pedicels. Material in AD matches closely with specimens from South Africa, New South Wales and Western Australia as well as a microfiche of its type in LINN, and corresponds closely with its description and illustrations in Wimmer's (1943-53) monograph of the subfamily.

Monopsis simplex is recorded as adventive in Australia from New South Wales (Beadle et al. 1963, 1982; presumably also Mueller 1876, Woolls 1891, as *Lobelia debilis* L.f.), Western Australia (Gardner 1930, as *Monopsis debilis*; Grieve & Blackall 1975; Green 1981), and from the southwestern districts of Victoria (Beaulehole 1980). The Victorian populations probably have a common origin with the southeast South Australian populations and these, like the separate Kangaroo Island introduction, are more likely to have originated from elsewhere in Australia than from a separate further introduction from South Africa; the species has been known for over a century in New South Wales.

The generic characteristics of the plant have been misconstrued by various workers, as has been independently discovered by Dr J.H. Willis, from his annotations of material in MEL. The plant's capsular fruit, dehiscing apically, and axillary flowers with corollas split on the adaxial side place it close to *Lobelia*. Indeed, only one reliable, but relatively obscure, generic character separates the two genera (Wimmer 1943-53). *Monopsis* has two greatly revolute narrow-linear stigmatic lobes ('filiform' according to Wimmer, but not in our material), while the two stigmatic lobes in *Lobelia* are short and more or less rotund. Alternative characters used by Grieve & Blackall (1975) and Beadle et al. (1963, 1982) do not work in this State. The former work distinguished *Monopsis* on its almost equal corolla lobes from the Western Australian *Lobelia* species with lower lobes much longer than the upper ones; in eastern Australia, however, *Lobelia pratioides* Benth. has almost equal corolla lobes. In the latter work *Monopsis simplex* was attributed red corollas and *Lobelia* white to purple, but annotations on the South Australian material of *Monopsis* refer several times to purple or deep purple corollas and only once to a "reddish purple" colour. South African specimens are annotated "purplish violet with darker centre" and "a deep violet blue . . .", while Wimmer (1957) describes it as "obscure violacea vel purpureo-coeruleo".

By its almost equal corolla lobes and linear to narrow-oblongate, sparingly denticulate leaves, *Monopsis simplex* superficially approaches most closely *Lobelia pratioides*. This species occurs in the same region but differs by its prostrate, stoloniferous perennial habit, narrow corolla lobes and upper anthers shortly ciliate on their distal margin. *simplex* is a decumbent to erect annual, not rooting at nodes, and has short, broad corolla lobes, and upper anthers shortly ciliate on their distal margin.

Specimens examined (chronologically arranged)

SOUTH AUSTRALIA, South-eastern region: *D. Hunt* 1396, 11.xi.1962, Hundred of Comaum, AD.—*D. Hunt* 2243, 15.xi.1964, Old Penola-Comaum track, AD.—*D. Hunt* 2598, 2.xii.1965, Penola Pine Forest Reserve, AD.—*K.M. Alcock* 176, x-xi.1968, Comaum, AD.—*K. Alcock s.n.*, s. dat. [prior to 1975], Comaum ca. 20 km E of Penola, AD97503127.—*K. Alcock* 21, iii.1976, Comaum, AD.—*R. Bates* 4013, 30.x.1977, near Mt Burr, AD. Kangaroo Island region: *G. Jackson* 1636, 11.xii.1983, Parndana golf course, AD.

NEW SOUTH WALES: *E. Betche* 145, 1882, Port Jackson, MEL.—*J.B. Cleland s.n.*, ix.1910, South Head, Sydney, AD97603097.

VICTORIA: *A.C. Beauglehole* 37938, 23.xi.1971, 5 miles W of Dergholm Post Office, MEL.—*A.C. Beauglehole* 37962, 26.xi.1971, 9¼ miles NW of Dergholm Post Office, MEL.—*A.C. Beauglehole & J.H. Willis s.n.*, 10.i.1972, about 11 miles SW of Casterton, in swamp \pm 1½ miles NW of old Wilkin School, MEL574469.

WESTERN AUSTRALIA: *J.H. Willis s.n.*, 2.xii.1950, Bow's farm, about 10 miles NNE of Esperance, MEL584833.—*T.A. Halliday* 214, 5.xii.1974, 7 km W of Coodernup, on Rivervale road, AD.

SOUTH AFRICA: *Anon. s.n.*, s. dat., without locality, LINN 1051.1 (microfiche, AD: holotype of *Lobelia simplex* L., the basionym).—*W.F. Purcell* 353, 30.x.1915, Bergvliet Farm, Constantia, SAM.—*W.F. Purcell s.n.*, 20.xi.1918, Bergvliet Farm, Constantia, Lategan's vlel, SAM 90312.—*G.J. Lewis* 1521, xi.1944, Elgin, SAM.

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